

1. (Amended) A method of producing an image-forming apparatus wherein a face plate having phosphors of the three primary colors is opposed to a rear plate comprising a plurality of electron-emitting devices, each having a first electrode and a second electrode, and a plurality of column-directional wires and row-directional wires are connected to the plurality of electron-emitting devices, said method comprising:

(a) a step of arranging a plurality of first electrodes and second electrodes on the rear plate;

(b) a step of forming a plurality of column-directional wires, wherein each of said column-directional wires connects commonly a plurality of said first electrodes;

(c) a step of forming a plurality of row-directional wires, wherein each of said row-directional wires connects commonly a plurality of said second electrodes,

the row direction is substantially perpendicular to the column direction, and intervals of said row-directional wires are larger than those of said column-directional wires;

(d) a step of forming an insulating layer between a row-directional wire and a column-directional wire at each of intersections between said row-directional wires and column-directional wires; and

(e) a step of applying a liquid containing at least a metal or a semiconductor so as to connect said first and second electrodes to each other according to an ink jet method,

wherein, at each of said intersections, each of said column-directional wires is disposed between each of said row-directional wires and said rear plate, and

wherein said step of forming the column-directional wires comprises:

a step of forming a film comprising a photosensitive material and an electroconductive material on said rear plate;

a step of irradiating desired areas of said film with light;

a step of patterning said film; and

a step of baking said patterned film.

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2. The production method of the image-forming apparatus according to Claim 1, wherein said step of forming the film comprising the photosensitive material and the electroconductive material on said rear plate is a step of applying said film in a first pattern.

3. The production method of the image-forming apparatus according to Claim 2, wherein said applying step in said first pattern is a step of selectively forming the film comprising said photosensitive material and electroconductive material on said rear plate through apertures of a mask having said apertures of a desired shape.

4. The production method of the image-forming apparatus according to either one of Claims 1 to 3, wherein said first electrodes and second electrodes are formed according to an offset printing method.

5. The production method of the image-forming apparatus according to any one of Claims 1 to 3, wherein a direction in which said first and second electrodes are opposing is substantially coincident with a longitudinal direction of said row-directional wires.

6. (Twice Amended) A method of producing an image-forming apparatus which comprises a face plate having phosphors, a rear plate having a plurality of electron-emitting devices and a plurality of wirings connected to the plurality of electron-emitting devices, said method comprising:

B1 (a) a step of arranging a plurality of first electrodes and second electrodes on a rear plate;

(b) a step of forming a plurality of column-directional wirings, wherein each of said row-directional wirings connects some of the first electrodes,

(c) a step of forming a plurality of row-directional wirings, wherein each of said row-directional wirings connects some of the second electrodes,

the row direction is substantially perpendicular to the column direction; and

(d) a step of forming an insulating layer between a row-directional wiring and a column-directional wiring at each of intersections between said row-directional wirings and column-directional wirings,

wherein a cross-sectional area of said row-directional wirings is larger than a cross sectional area of said column-directional wirings, and

wherein said step of forming the column-directional wirings comprises:

a step of forming a film comprising a photosensitive material and an electroconductive material on said rear plate;

a step of irradiating desired areas of said film with light;

a step of patterning said film; and

a step of baking said patterned film.

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7. (Amended) A method of producing an image-forming apparatus which comprises a face plate having phosphors, a rear plate having a plurality of electron-emitting devices and a plurality of wirings connected to the plurality of electron-emitting devices, said method comprising:

(a) a step of arranging a plurality of first electrodes and second electrodes on a rear plate;

(b) a step of forming a plurality of column-directional wirings, wherein each of said column-directional wirings connects some of the first electrodes;

(c) a step of forming a plurality of row-directional wirings, wherein each of said row-directional wirings connects some of the second electrodes,

the row direction is substantially perpendicular to the column direction; and

(d) a step of forming an insulating layer between a row-directional wiring and a column-directional wiring at each of intersections between said row-directional wirings and column-directional wirings,

wherein a width of said row-directional wirings is wider than a width of said column-directional wirings, and

wherein said step of forming the column-directional wirings comprises:

a step of forming a film comprising a photosensitive material and an electroconductive material on said rear plate;

a step of irradiating desired areas of said film with light;

a step of patterning said film; and

a step of baking said patterned film.

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8. (Twice Amended) A method of producing an image-forming apparatus which comprises a face plate having phosphors, a rear plate having a plurality of electron-emitting devices and a plurality of wirings connected to the plurality of electron-emitting devices, said method comprising:

(a) a step of arranging a plurality of first electrodes and second electrodes on a rear plate;

(b) a step of forming a plurality of column-directional wirings,

wherein each of said column-directional wirings connects some of the first electrodes;

(c) a step of forming a plurality of row-directional wirings,

wherein each of said row-directional wirings connects some of the second electrodes,

the row direction is substantially perpendicular to the column direction; and

(d) a step of forming an insulating layer between a row-directional wiring and a column-directional wiring at each of intersections between said row-directional wirings and column-directional wirings,

wherein a thickness of said row-directional wirings is thicker than a thickness of said column-directional wirings, and

wherein said step of forming the column-directional wirings comprises:

101 a step of forming a film comprising a photosensitive material and an electroconductive material on said rear plate;

a step of irradiating desired areas of said film with light;

a step of patterning said film; and

a step of baking said patterned film.

9. The production method of the image-forming apparatus according to any one of Claims 1 to 3, wherein said image-forming apparatus further comprises a spacer for supporting the space between said face plate and rear plate, said spacer being placed on said row-directional wire.

10. A method of producing an image-forming apparatus wherein a face plate having a phosphor is opposed to a rear plate comprising a plurality of

electron-emitting devices, each having a first electrode and a second electrode, and a plurality of wires connected to the plurality of electron-emitting devices, said method comprising:

- (a) a step of arranging a plurality of first electrodes and second electrodes on the rear plate;
- (b) a step of selectively forming a film comprising a photosensitive material and an electroconductive material on said rear plate through apertures of a mask having the apertures of a desired shape;
- (c) a step of irradiating desired areas of the film formed on said rear plate, with light;
- (d) a step of patterning said film;
- (e) a step of baking said patterned film to form a plurality of wires connected to said electrodes; and
- (f) a step of forming an electroconductive film so as to connect said first and second electrodes to each other.

11. The production method of the image-forming apparatus according to Claim 10, said production method of the image-forming apparatus further comprising a step of forming a fissure in the electroconductive film placed between said electrodes.

12. The production method of the image-forming apparatus according to Claim 11, wherein said fissure is formed by allowing an electric current to flow in said electroconductive film.

13. An image-forming apparatus produced by the production method as set forth in any one of Claims 1 to 3, 10 to 12, and 14.

14. A method of producing an image-forming apparatus wherein a face plate having a phosphor is opposed to a rear plate comprising a plurality of electron-emitting devices, each having a first electrode and a second electrode, and a plurality of wires connected to the plurality of electron-emitting devices, said method comprising:

(a) a step of arranging a plurality of first electrodes and second electrodes on the rear plate;

(b) a step of selectively forming a film comprising a photosensitive material and an electroconductive material on the rear plate through apertures of a mask, the apertures having a desired shape;

(c) a step of irradiating desired areas of the film formed on the rear plate with light;

(d) a step of patterning the film; and

(e) a step of baking the patterned film to form a plurality of wires connected to the electrodes.



--15. (New) A method of producing an image-forming apparatus which comprises a face plate having phosphors, a rear plate having a plurality of electron-emitting devices and a plurality of wirings connected to the plurality of electron-emitting devices, said method comprising:

(a) a step of arranging a plurality of first electrodes and second electrodes on a rear plate;

(b) a step of forming a plurality of column-directional wirings, wherein each of said column-directional wirings connects some of the first electrodes;



(c) a step of forming a plurality of row-directional wirings by using screen printing method,

wherein each of said row-directional wirings connects some of the second electrodes,

the row direction is substantially perpendicular to the column direction; and

(d) a step of forming an insulating layer between a row-directional wiring and a column-directional wiring at each of intersections between said row-directional wirings and column-directional wirings,

wherein, said step of forming the column-directional wirings comprises:

a step of forming a film comprising a photosensitive material and an electroconductive material on said rear plate;

a step of irradiating desired areas of said film with light;

a step of patterning said film; and

a step of baking said patterned film.

16. (New) A method of producing an image-forming apparatus which comprises a face plate having phosphors, a rear plate having a plurality of electron-emitting devices and a plurality of wirings connected to the plurality of electron-emitting devices, said method comprising:

(a) a step of arranging a plurality of first electrodes and second electrodes on a rear plate;

(b) a step of forming a plurality of column-directional wirings, wherein each of said column-directional wirings connects some of the first electrodes;

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(c) a step of forming a plurality of row-directional wirings, wherein each of said row-directional wirings connects some of the second electrodes,

the row direction is substantially perpendicular to the column direction; and

(d) a step of forming an insulating layer between a row-directional wiring and a column-directional wiring at each of intersections between said row-directional wirings and column-directional wirings,

wherein, at each of said intersections, each of said column-directional wirings is disposed between each of said row-directional wirings and said rear plate, and wherein said step of forming the column-directional wirings comprises: